# **Egypt's Poultry Sector**

During the 1980s, Egypt's Gross Domestic Product (GDP) grew at an average annual rate of 5.5 percent per year. However, in 1990, growth dropped to a low of 1.1 percent as the economy underwent structural changes. GDP growth resumed slowly to average 2.9 percent in 1993, 3.9 percent in 1994, and 4.7 percent in 1995. Egypt's GDP growth rate accelerated further to average 5.4 percent annually between 1996 and 2000, and is projected to be slightly over the 5-percent range in 2001-2010 [44]. Rising per capita income encouraged animal protein consumption in the 1990s, and sustained growth in income-driven demand for poultry and other meats is expected to continue in the future. Poultry is a more efficient feed converter and has a shorter production cycle than red meat animals. Thus, in the past, Government policies leaned more toward increasing poultry meat production over red meats. Government policies continue to shape the structure and efficiency of the domestic poultry industry and trade.

### **Economic Reforms and Policies**

The poultry and egg sector in Egypt has developed dramatically since the early 1990s, fueled by economic reform and government policy shifts. In 2001, poultry meat production, at 646,600 metric tons, exceeded all other meats, including beef and veal, buffalo meat, sheep and goat meat, camel meat, and others (fig. 8a). In value terms, 26 percent of Egypt's total livestock products came from poultry meat and egg production, and Egypt's livestock sector contributed 27 percent of total domestic agricultural production in 1999 [7].

In 1986, Egypt adopted new economic reforms and structural adjustments to reduce the role of government and encourage free market operations. The economic reform was designed to reduce fiscal deficits by eliminating price distortions through the liberalization of pricing, trade, and foreign exchange policies. Introduction of additional liberalization policies in 1991 further affected Egypt's agricultural production, competitiveness, and international trade, and created a more competitive market for feed and meat production. The commercial poultry sector became more dynamic, and rapidly overcame chronic domestic feed shortages. Egypt's limited arable land and pastureland created competition between food crops for human consumption and feedgrains, oilseeds, and green fodder for animal feeding. Currently, the country is a net food and feed importer. The ready availability of feedstuffs from abroad and subsidies for poultry producers

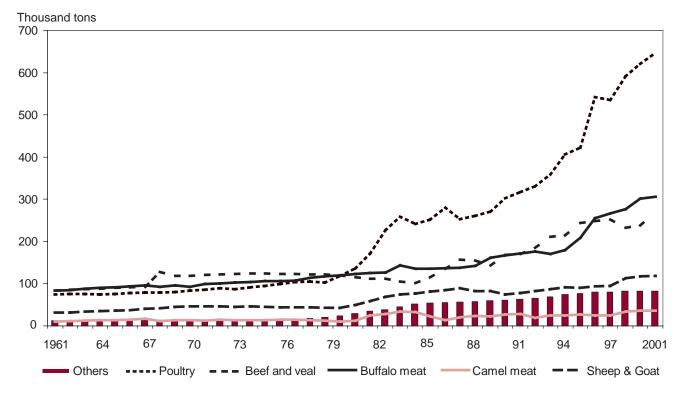
were instrumental in encouraging producers to depend mostly on foreign feed supplies to assure the feed flow to their birds, and the poultry sector has remarkably increased meat supplies at relatively stable prices.

In late 1986, the Egyptian government eliminated feed subsidies for poultry producers, which forced many broiler growers to leave the sector, as they were unable to continue production with the sudden rise in feed prices. Geese, pigeons, and most turkeys and ducks are produced in small backyard operations, which rely more on locally available grains and growers' own feed production. Consequently, their relative share of total poultry production increased. However, the onset of the privatization process and the rapid acceleration of the commercial sector, due to economies of scale, reversed the output course to the benefit of the commercial sector, which was able to gradually replace backvard operations. These developments resulted in substantial gains in physical productivity and economic efficiency and led to an increasing share of chicken in total poultry meat production (fig. 8b). This share rose considerably, from 71.8 percent of total poultry production in 1990, just 1 year before the privatization process started, to 83.4 percent in 2001.

There is a strong preference in Egypt for live birds, slaughtered immediately at sale to consumers, over frozen poultry meats. It is estimated that 70 percent of chicken production is marketed live and the remaining 30 percent is sold frozen [45]. In 1997, Egypt had 19 modern and 101 traditional slaughterhouses, with total slaughter of 28.1 million and 6.3 million birds per year, respectively [42]. The available total capacity of both slaughterhouses and cold storage facilities can handle about 25 percent of total production [45]. In 2000, the government issued a decree to prohibit the marketing of live chickens in Egypt's largest two cities, Cairo and Alexandria, for sanitary reasons. The immediate goal of this decree was to increase the marketing of frozen chicken [45].

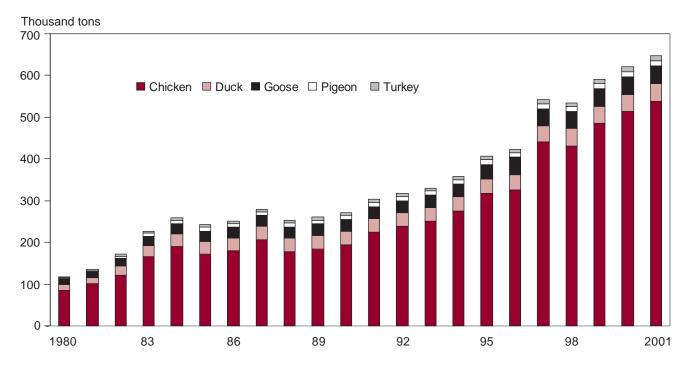
From 1986 to 1997, there was a ban on poultry imports to encourage domestic production. This ban was replaced with an 80-percent tariff rate in 1997, scheduled to decline further to 70 percent on whole birds in 1998. However, customs duties remain at 80 percent, and imports of poultry from all sources are still negligible, accounting for about 4,000 tons per year. Under the World Trade Organization (WTO) agreement, which Egypt has signed, all tariffs will have to be reduced and gradually eliminated to open

Figure 8a **Egypt's total meat production, by type; 1961-2001** 



Source: Economic Research Service/USDA.

Figure 8b **Egypt's poultry meat production, by type; 1980-2001** 



up the market for poultry. However, the realization of such policy is unlikely during this decade. Further reduction of import tariffs will increase imports of poultry meat and reduce feed imports, causing lower domestic poultry production.

# **Poultry Meat Industry**

### Poultry types

Egypt's poultry sector includes chickens, which are further subdivided into commercial (international breeds) and Balady (traditional breeds) operations, and a classification called "other," which includes ducks, geese, turkeys, and pigeons, and is subdivided into backyard and commercial operations. In 2000, 63 percent of Egypt's chicken meat output was produced by commercial operations. The traditional (backyard) operations, in contrast, produce 22 percent of chicken meat, 64 percent of ducks, 34 percent of turkeys, and all geese and pigeons [11, 45] (table 3). According to statistics collected by the Food and Agriculture Organization of the United Nations (FAO), stocks (all sources) increased nearly fourfold, from 27.2 million birds in 1961 to 112.1 million birds in 2002. More than 82 percent of total poultry stocks were chickens, 8.1 percent were ducks, 8.1 percent were geese, and just under 2 percent were turkeys. Pigeon stocks are not recorded.

Poultry production in Egypt varies widely according to the adoption of modern technologies, available management skills, and the size of commercial (compared with traditional) operations. Chickens are kept mainly for meat and egg production, while ducks, geese, turkeys, and pigeons are kept for meat. Small growers principally operate backyard systems. They contribute a significant proportion of the poultry meat and egg production, particularly so before the start of largescale commercial production during the 1970s. Small growers raised mainly traditional breeds (Balady), which are well adapted to harsh environmental conditions, are resistant to disease, and can accommodate feed with low nutritional value. Most small farmers keep poultry flocks of more than 20 birds, containing different varieties of poultry including ducks, geese, and pigeons.

Commercial broiler chicken breeds are more efficient in feed use with a feed-to-meat conversion ratio of 2.65 pounds of feed per pound of meat, compared with the Balady strains that average nearly 5 pounds [9]. In addition, the commercial strains average 7-week growth cycles and could complete an average of 5 cycles in a year. The Balady breeds grow more slowly and need 17 weeks to reach slaughter, and therefore

Table 3—Egypt poultry stocks by type, 1961-2002

Year	Chickens	Ducks	Geese	Turkeys	Total
				_	poultry
			Million bird		
1961	21.8	2.6	2.3	0.6	27.2
1962	22.1	2.6	2.3	0.6	27.6
1963	22.4	2.7	2.3	0.6	28.0
1964	22.7	2.7	2.3	0.6	28.4
1965	23.0	2.8	2.4	0.6	28.8
1966	23.3	2.8	2.4	0.6	29.1
1967	23.6	2.9	2.4	0.6	29.5
1968	23.9	2.9	2.4	0.6	29.9
1969	24.2	3.0	2.5	0.6	30.3
1970	24.5	3.0	2.5	0.7	30.7
1971	24.8	3.1	2.5	0.7	31.1
1972	25.2	3.1	2.5	0.7	31.5
1973	25.5	3.1	2.6	0.7	31.8
1974	25.8	3.2	2.6	0.7	32.2
1975	26.1	3.2	2.6	0.7	32.6
1976	26.4	3.3	2.6	0.7	33.0
1977	26.7	3.3	2.7	0.7	33.4
1978	27.0	3.4	2.7	0.7	33.8
1979	27.3	3.4	2.7	0.7	34.2
1980	27.6	3.5	2.7	0.7	34.6
1981	27.9	3.5	2.8	0.8	34.9
1982	28.2	5.0	4.0	0.8	38.0
1983	29.9	6.2	5.1	1.1	42.4
1984	32.0	6.7	5.5	1.2	45.4
1985	32.3	6.9	5.6	1.2	46.1
1986	32.7	7.0	5.7	1.3	46.7
1987	33.1	7.1	5.8	1.3	47.3
1988	33.5	7.2	5.9	1.3	47.9
1989	33.9	7.3	6.0	1.3	48.5
1990	37.2	7.4	6.1	1.3	52.1
1991	43.5	7.6	6.2	1.4	58.6
1992	50.9	7.7	6.3	1.4	66.3
1993	59.6	7.8	6.4	1.4	75.2
1994	62.0	7.8	6.5	1.4	77.7
1995	65.0	8.0	7.5	1.4	82.0
1996	68.0	8.5	8.8	1.5	86.8
1997	90.0	8.8	8.9	1.5	109.2
1998	86.0	9.1	8.9	1.5	105.5
1999	88.0	9.1	9.0	1.8	107.9
2000	89.0	9.1	9.1	1.9	109.1
2001	91.0	9.1	9.1	1.9	111.1
2002	92.0	9.1	9.1	1.9	112.1

Note: No data on pigeon stocks are available.

Source: FAO data, http://www.faostat.fao.org/November 2003

could complete at most 3 cycles per year [9]. Consequently, production from broiler operations using commercial techniques is increasing faster than Balady. Other poultry species are mostly raised in backyard operations using low-grade feed rations; most are domestic strains that are not efficient feed converters. Improved, more efficient international breeds and hybrids of domestic strains are slowly replacing them.

#### Poultry meat consumption

Poultry consumption in Egypt is far below the average for middle-income countries, but the industry most likely will continue to increase its production efficiency and poultry will continue to be the country's leading meat consumed. Per capita poultry meat consumption in Egypt has increased from 2.4 kilograms (kg) in 1961 to about 8.9 kg in 2000, but is still under the world average of 10.9 kg. Compared with other middle-income countries, Egypt's per capita consumption is considerably less than in Saudi Arabia, Brazil, Mexico, Poland, and Iran, but higher than in Morocco, Algeria, or Syria (fig. 9).

Consumption in 1988 began to suffer as prices increased after the government's decision to lift subsidies on producers and consumers that started in 1973. In addition, price controls on food, feed, and livestock products were lifted. These liberalization policies

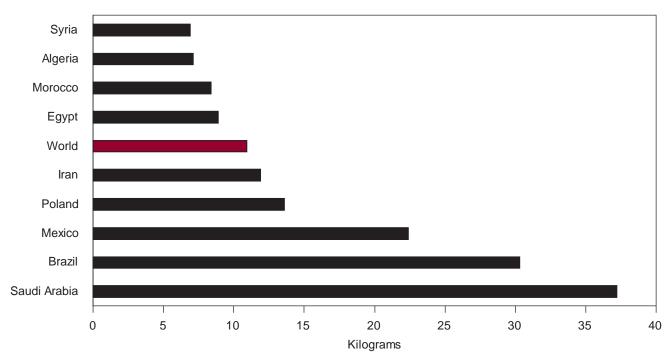
encouraged private sector investment in the poultry sector and boosted meat and egg output. During the 4 years following the sector's privatization, per capita consumption rose steadily, ending the 1990s at an average annual growth rate of 6.9 percent, or nearly double the 3.5-percent world average. Finally, because it is less expensive than beef, buffalo, lamb, goat, or pigmeat, poultry is the most consumed of all meats in Egypt.

### Poultry meat production

The distribution of total meat production in Egypt is quite different from that in the rest of the world (fig. 10). Egypt's total meat production, listed in descending order of importance, includes poultry, beef, buffalo, mutton and lamb, goat, camel meat, pigmeat, and others (mostly rabbits), and increased from 435,000 tons in 1980 to 1.46 million tons in 2001. The increase represents a 5.3-percent annual growth rate, nearly double the 2.7-percent world average during the same period.

Responding to increased demand, Egypt's poultry meat production has trended upward over the last 40 years. Rising demand for poultry meat pushed poultry to 44.3 percent of total domestic production compared with 29.6 percent for the world in 2001. During 1961-2001, poultry meat production grew 770 percent in Egypt, with average annual growth increasing from 1 percent during the 1960s to 8.7 percent during the 1990s.

Figure 9
Per capita poultry meat consumption in Egypt, compared with world average and selected middle-income countries; 2000



In the 1990s, Egypt's 8.6-percent annual growth rate of poultry meat production exceeded the world average of 5.2 percent and was much higher than other middle-income countries such as Saudi Arabia (5.2 percent), Turkey (3 percent), and Colombia (4.1 percent). In comparison, the U.S. annual growth rate was 4.3 percent and the EU's growth rate was 3.3 percent during the 1990s. China, Argentina, and Brazil, where poultry meat production grew at an annual rate between 9 and 12.5 percent in the 1990's, exceeded Egypt's annual growth rates (fig. 11).

# **Egypt's Egg Industry**

## Egg Consumption in Egypt

During the 1970s and 1980s, egg consumption in Egypt rose on a per capita basis and reached a peak in the late 1980s, due to heavy government subsidies designed to encourage egg and poultry consumption as an inexpensive protein source to people in low-income brackets. However, after the elimination of producer and consumer subsidies, consumption declined sharply, reaching as low as 54 eggs per capita in 1995, then rebounding to 62 eggs (about 3 kilograms) per person in 2000. Currently, Egypt's per capita egg consumption is below the world average and also below levels in many other middle-income countries. In fact, it is closer to low-income countries' average rather than the middle-income countries' average (fig. 12).

Egg imports have been banned since 1989, except for hatching eggs. At their 1982 peak, egg imports amounted to 12,000 tons, about 11 percent of total domestic supply. Imports averaged less than 6 percent of total consumption during the 1980s, before being banned to pro-

Figure 10 **Total meat production distribution** 

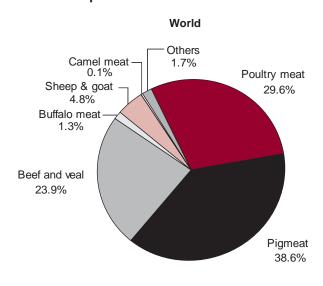
tect domestic producers. Exports, mostly to neighboring countries, are small, fluctuating between 20 and 145 metric tons per year during the 1990s [42].

## Egg Production in Egypt

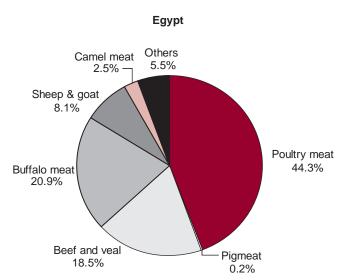
Egg production made substantial progress during the 1970s, growing by 6.8 percent a year, more than double the 2.9-percent world growth rate. In the 1980s, the annual growth rate of 5.9 percent was still larger than the 3.7-percent world rate, and in the 1990s, both rates were equal at 4 percent annually. The high growth rate of the 1970s was mainly due to government feed subsidies. The government also helped producers by establishing public enterprises with the primary purpose of introducing modern technology and skilled management into the industry.

Production peaked in the late 1980s with the benefit of government price subsidies to both producers and consumers. These subsidies were lifted in 1988, however, causing a setback for the egg industry. Egg production rose at a steady rate during the 1990s. In 2000, production climbed back to about 4 billion eggs, still 8 percent below the 1980s peak.

Commercial operations supply 70 percent of total output and the backyard Balady operators produce the remaining 30 percent. The number of laying hens was estimated at 17.2 million in 2000, of which 11 million were in the commercial sector and the remainder were mostly in the backyard Balady sector. Each laying hen in a commercial operation lays about 240-270 eggs per year, compared with only 170-180 eggs for the Balady breed. Eggs produced from international breeds weigh 50-56 grams, while Balady eggs average 35-40 grams.



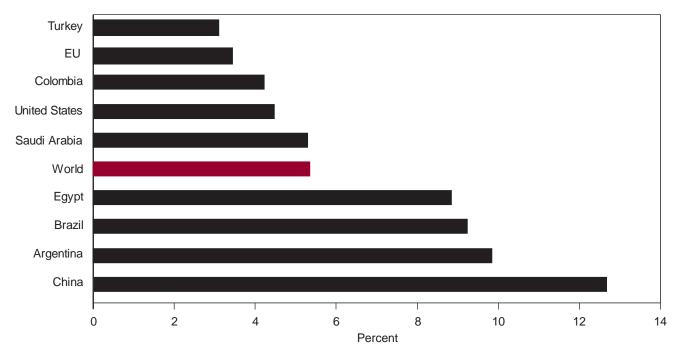
Production in 2001 - 236.5 million tons



Production in 2001 - 1.46 million tons

Figure 11

Average annual poultry production growth rates in selected middle-income countries compared with the United States, EU, and world average; 1990-2000



Source: Economic Research Service/USDA.

Figure 12
Per capita egg consumption in Egypt, compared with the United States, EU, world average, and selected middle-income countries; 2000

